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EXAMINER

GESESSE, TILAHUN

ART UNIT

PAPER NUMBER

2684

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/601,662

Applicant(s)

DI CAMILLO ET AL.

Examiner

Tilahun B. Gesessse

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 7,9-14,16--19 are rejected under 35 U.S.C. 102(e) as being anticipated by Nivens.

Claims 7 and 14, Nivens teaches a communications station,(see figure 1) comprising'.

Nivens teaches a plurality of variable gain amplifiers for amplifying respective input signals to provide intermediate signals (see column 8, lines 1-13 and figure 2)

Nivens teaches a plurality of high gain amplifiers for amplifying the intermediate signals from said variable gain amplifiers to provide output signals (see figure 1 and 2),

Nivens teaches a plurality of transmitting antennae for transmitting the output signals from said high gain amplifiers to a plurality of receiving stations, a plurality of monitoring power supplies for providing a voltage to each of said high gain amplifiers and for monitoring the current in each of said high gain amplifiers, permitting determination of the power provided to the output signals by said high gain amplifiers (see column 6, line 10-column 8, line 13 and figures 1-2 and 4)

Nivens teaches a power profile processor (216 of figure 2) responsive to a desired power setting signal from one of the receiving stations for providing a gain signal to one of said variable gain amplifiers associated with said one of the receiving stations to adjust the gain of said one of said variable gain amplifiers so as to adjust the power provided to the output signal of the high gain amplifier associated with said one of said variable gain amplifiers (see figure 2 and column 8, lines 1-13 and figure 4, column 12, lines 1-62).

Claim 9 and 16, Nivens teaches an input circuit for providing the input signals (see figure 2 items 231 and 237).

Claim 10-12 and 17- 18 , Nivens teaches the input circuit further comprises a plurality of low noise amplifiers for amplifying the respective input signals from the demodulator and applying the resulting signals to the variable gain amplifiers (see figure 2) .

Claim 13 and 19, Nivens teaches the variable gain amplifiers (224), said high gain amplifiers, said transmitting antennas, said monitoring power supplies (216), and said power profile processor are within a communications satellite (see figures 1-2).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-6, are rejected under 35 U.S.C. 103(a) as being unpatentable over Nivens et al (US 6,430,418)"Nivens" in view of Lomp (US 5,574,747).

6. Claim 1-3 and 5-6, Nivens teaches a method of controlling the power to transmitters in a multi-transmitter communications station, (see figures 1-2, and 4) comprising:

Nivens teaches determining the power being consumed by each of the transmitters (UET 105 transmit power level to be sufficiently high to satisfy the error threshold , column 6, lines 31-59).

Nivens teaches determining a desired power of the transmitters (see column 8, lines 1-31) .

Nivens teaches comparing the power being consumed with the desired power (see figure 4).

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Nivens teaches determining whether the power needed for the desired power settings is available if the power needed for the desired power settings is available, adjusting the power settings to provide the desired power settings (column 10, lines 58-68).

Nivens does not teach determining load of the transmitters, and if there is sufficient power for the determined load.

However, Lomp teaches determining load of the transmitters, and if there is sufficient power for the determined load (column 16, lines 36-41). Nivens and Lomp both teach power control of a transmitter, then, it would have been obvious to an artisan of ordinary skill in the art at the time of the invention was made to modify by monitoring the load of the transmitter, as taught by Lomp, in order to determine the signal transmitting level or how high the amplifier be set in order to overcome the processing load that the transmitter encounters.

Claim 4, it is program per set type of claim, it's bond and meet corresponds to claim 1 above. Therefore, it is analyzed and rejected as set forth in the claim.

7. Claims 8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nivens in view of Lomp as applied to claims 1-7, 9-14, 16-19 above, and further in view of Corominia et al (US 20040224633).

Claim 8 and 15, Nivens and Lomp do not teach a traveling wave tube amplifier. However, Corominia teaches a traveling wave tube amplifier (TWTA) (see abstract and

figure 1). Then it would have been obvious to ordinary skill in the art at time of the invention was made to utilize TWTA amplifier to monitor transmission power.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tilahun B Gesesse whose telephone number is 571-272-7879. The examiner can normally be reached on flexible schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on 571-272-7899.

The Central FAX Number is 571-273-8300. For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the Central FAX number, unless an exception applies.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-

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free).

2/28/06
Tilahun Geesese
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PRIMARY EXAMINER